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THE CHRONICLE
of Early American Industries

Volume III No. 14 January 1948

The Early American Iron Industry

by CHARLES RUFUS HARTE

The Beginnings

Gathering bog iron and dredging up the pond variety; mining the other forms of iron ore; and either smelting the proceeds in the blast furnace and casting pigs, "sowes," pots, kettles, fire-backs and the like; or reducing the ore by the so-called "direct" process, and forging horse and ox shoes, hinges, hasps, spikes, nails, tools and whatever else had to withstand bending and shock, from the resultant "wrought" iron, constituted one of the first and most important of the early American industries.

The first record of American iron occurs in Thomas Heriot's account of the second Sir Walter Raleigh expedition, which in 1585 had its headquarters at Roanoke Island, North Carolina. Describing the "Marchantable commodities" which he felt might be exploited to advantage, after a paragraph on "civet cattes," southern relatives of our northern "wood pussies," of which former he says:

> "there was founde one to have beene killed by a salvage or inhabitant; and in another place the smell where one or more had lately beene before * * * * good profite will rise by them."

Heriot records:

"Iron"

> "In two places of the countrey specially, one about fourscore and the other sixe score miles from the Fort or place where wee dwelt; wee found neere the water side the ground to be rockie, which by the tryall of a minerall man was founde to holde Iron richly. It is founde in manie places of the countrey

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Documentary Notes

Compiled by P. R. HOOPES

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Observations Upon the Art of Making Steel By the Reverend Daniel Little, F.A.A.

As steel is an article of commerce, and of great use both in the arts, manufactures and husbandry of every nation; and as we have the best of iron already manufactured in America, it is thought that the manufacturing of steel of a good quality, deserves the attention and encouragement of those who wish the welfare of the United States. What time I could redeem from other necessary business for several years past, has been employed in such disquisitions and experiments, as might tend to facilitate the art of making steel, and others near akin to it.

Those writers upon the subject which I have met with tell us, that the principal difference between iron and steel consists in this, that the latter is combined with a greater quantity of phlogiston than the former. Phlogiston exists in all inflammable substances, and in some that are not inflammable. Charcoal, and the coals of bones, horns and hoofs of animals, have been used as fit substances for communicating phlogiston to iron in making steel.

Steel is sometimes made by fusion of ore or pig-iron. The method is similar to that of reducing pig-iron to malleable iron, with this difference, that as steel requires more phlogiston than is necessary to iron, all the means must be made use of that are capable of introducing into the iron a great deal of phlogiston; that is, by keeping it, while in fusion, encompassed with an abundance of charcoal, etc.

The other method of making steel is by cementation, as it is called; that is, to convert bar-iron into steel; which is done by a cement made of those substances which contain the greatest quantity of

phlogiston. Put the bar-iron with this cement into a vessel that will bear a strong fire; lute on a close cover, so as to prevent the cement taking flame and consuming; put the vessel in a furnace where the bars may be kept red-hot till they are converted into steel, which will be in a longer or shorter time, according to the bigness of the bars, and the quantity of cement.

This latter method has chiefly engaged my attention, which method is pretty well known in some parts of America, and, for many years past, steel has been made by it in several of the United States. Yet, so far as I have been informed, it has generally been of an inferior quality, and very little used for edge tools, which I supposed could not arise from the quality of the iron, for we have the greatest variety, and the best sort, in many parts of the country. I then conjectured there might be found some other inflammable substance for a cement, which, if properly applied, would impregnate the iron with phlogiston more advantageously. And, after many experiments, I found a particular marine plant that requires no other preparation but drying and pulverizing, and is commonly known by the name of rock-weed, or rock-ware, and is in the greatest plenty on our rocky shores, coves, creeks and harbours of the sea. In making some experiments upon this plant for a flux powder, a small bit of iron was put into a crucible, and filled with the said cement; and, very unexpectedly, after it had been in a little more than a cherry heat for five or six hours, it was converted into steel, which gave me the first hint of its use in making steel, since which I have had repeated experience of its excellency for the same purpose.

It needs no other preparation than to be cut off from the rocks with a scythe or sickle, spread on the dry land 'till the rains have washed off the greater part of the sea-salt, then dried and pulverized, then used as other cements are in making steel: or, instead of washing off the sea-salt, it is better for some particular kinds of iron, to neutralize it by adding a fixed alkali.

To two parts of the plant well dried and pulverized, add one part of good wood-ashes; mix together and moisten the whole with water or rather urine to the consistence of a very thick paste.

It is well known that in every new art, and in perfecting old ones, many unforeseen difficulties arise, and sometimes considerable fortunes have been spent before the manufacturer or the public have been much benefited. And since honest but too credulous minds are often deceived by uncertain proof, and being willing to satisfy myself and others, by a better testimony than my own, I engaged a gentleman (Col. Eliot of Connecticut) of ability in the steel way for many years, whose furnace was complete and large, to make experiments upon my new discovered substance for a cement, who has written me, that "this steel is preferable to any he had ever made before." After all, I suppose different modes of preparation and further experiments will more fully ascertain its utility.

The matter of the furnace must be of such substances as will endure a strong fire without fusion. Asbestos has been used to advantage, but a sufficiency of it is not found in many places. Pipe-clay with one third part of pond-sand, or, which is better, white stones free from grit, well burnt, and pulverized, instead of sand, some species of slate and talc may be used with pipe-clay for furnaces and crucibles.

The chest or intrior part of the furnace, for depositing the cement and bars of iron, must be covered so close that the inflammable substance within may not be consumed, but changed like wood in a coal-kiln. The iron to be chosen of the best quality; its toughness and malleability are marks of choice.

Of the ore of iron.— This is often discovered by the magnet, but a great part of the best ore is that which the magnet will not attract, as Linnaeus and Macquer justly observe. When in that state it often resembles the rust or calx of iron. Many tons of which are brought to the iron-works in this neighbourhood, from which the best of iron is made. In its natural state the best magnetic bar will not attract the smallest particle; but when roasted with charcoal it becomes magnetic. This method of knowing whether any earth or stones contain the true ore of iron, may be of use to discover new bodies or beds of ore. The reduction of metals, or restoring them to their metallic state from their calces, by combining them with the inflammable principle in the application of charcoal, may sufficiently show the efficacy of the above method for the discovery of the earth of iron in those substances on which the magnet has no effect.

(Mem. of the American Academy of Arts & Sciences. Vol. I, 1785, pp. 525-528)

XX

Hints to Manufacturers

The practice of beginning works on a large and expensive plan is attended with two very great evils. It prevents prudent people and people of small stocks, engaging in them. It renders such works very hazardous adventures, for all new works are liable to losses from want of experience in the owners and workmen; and an error committed in large works may prove fatal to a moderate capital, which would scarcely be perceived in similar works on a small plan. In works not well understood, the losses which arise from doing the business in a less perfect manner on a small scale, are small compared with those which attend committing errors in works on a large scale; and in all new works errors will be made. In this country where the value of money is high, it is almost impossible any profit should be a compensation for having so large sums out as must be put into the expensive projects. Most new works have been begun too large in this country. If we built a Slitting Mill, it was made sufficient to slit as much Iron in a week as would sell in half a year. If we built a Glass House, it was at the expense of thousands, and calculated to cover all that part of the country with glass, which was not covered by the house. The history of Potash works in New England ought to be a lesson to every manufacturing projector — The first potash work in this country is said to have been erected at, or near what is now called Belchertown in Massachusetts. The proprietor began with building an enormous great House, somewhat like a large New England Meeting House, this building he furnished with as many large tubs full bound with strong Iron hoops as could be conveniently placed round the inside of the house, each tub so high and large that a person might as well clean the Augean stable as clean it out, from these his ley was to be drawn. In the meantime people were employed to cut out and burn the wood of the surrounding forests to supply ashes, which indeed were procured in considerable quantities, but as is usual in such attempts not proportioned to the expense. By the time his ashes were ready he had built in the centre of his house, four furnaces, the fires of which were made to meet at a point in one chimney which was to carry up the Smoke, with an idea that he could make a more intense heat by the meeting of the fires of four furnaces than by any single furnace. The intention was, that the strong ley should be made to run in small streams from the surrounding vats into the place where the fires of his four furnaces met, which were to form so intense a heat as to constantly evaporate all the moisture and let the dry salts fall into a bed or pan which was provided below to receive them. These furnaces being duly dried and made hot, the fires were urged, and the ley suffered to run in small streams to the place where it was evaporated, but the instant the ley came into this violent heat the chimney blew up, and every thing near it suffered by the explosion. This taught the proprietor that he must boil his ley, and for that purpose he procured pans and went on to make more potash which was sent to market, but what with expenses altogether disproportioned to the business, and what with errors he made in prosecuting the project, the man broke and his potash works went to ruin.

After this some gentlemen from Scotland set up works in Suffield in Connecticut, they brought out from Scotland every utensil even to the tubs and erected a work somewhat in the Meeting house style, but being men of business and prudence they continued their works perhaps without great loss, or great profit. From that time to this the projects for making potash have become less and less expensive, till now some of the most profitable potash works we have, were erected at less than twenty dollars expense exclusive of the Iron Kettles.

Begin manufacturing projects with small works and add what by experience is found necessary.

(Gazette of the U. S. May 16, 1789)

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> else. I knowe nothing to the contrarie, but that it maie bee allowed for a good marchantable commoditie, considering there the small charge for the labour and feeding of men; the infinite store of wood; the want of wood and deernesse thereof in England; and the necessity of ballasting shippes."

Heriot might well have made a much stronger plea for the adoption of his suggestion. At this time, and for that matter for many years thereafter, wood, in the form of charcoal, was the only fuel used in working with iron. England had watched with growing concern the inroads the developing iron industry was making into her scanty supply of timber, with the consequent threat to her highly important ship-building, and had imposed restrictions of increasing severity until by 1585 there were a number of localities in that country where iron working of any kind requiring charcoal fires was strictly forbidden. But Heriot's words evidently fell upon deaf ears. Nothing came of them then, and in view of the growing hostility of the "salvages" the expedition returned to England the following year.

The next record came from Virginia, when in 1608 the Virginia Company's Jamestown settlement sent home what must have been about fifty tons of iron ore, for from it were produced at least 17 tons of iron, that amount having been sold, at £4 per ton to the East India Company. As to quality, Sir Thomas Gates, testifying, in 1610, before the council of the company, stated that this Virginia "oare" had been found to yield as good iron as any in Europe.

In 1619 the company decided to work the ore in America, and sent over workmen to "set up three iron works." By 1620 the work was so well advanced that it was expected iron would be produced by Easter of 1621, but the deaths of three of the principal workers made that impossible. To replace the loss one John Berkley, his son Maurice, and some twenty skilled men were sent from London, and under repeated urgings from the home office, on March 22, 1622, everything was in readiness to produce what would have been the first iron made by the blast furnace in America. But the Indians had other ideas. They had watched the developments with growing disfavor, and on the day which it had been hoped would mark the beginning of a new and important industry for the colony, they attacked, wiping out the settlement and destroying the plant. Although a short time before the massacre it had been reported to the home office in London that the locality, Falling Creek, was fitted for making iron:

> "as if Nature had applied herself to the wish and dictation of the workman; where also were great stones, hardly seene elsewhere in Virginia, lying on the place, as though they had beene brought thither to advance the erection of those works"

nothing further was done in that colony for many years, and the scene shifted to Massachusetts.

"Iron stone" had been found in Massachusetts as early as 1632; in 1637 the General Court of that colony had granted to Abraham Shaw one-half of the benefit of any:

> "coles or yron stone wch shal be found in any common ground wch is in the countryes disposing,"

and in 1642 Thomas Bridges took to London some speciments of iron ore from the present Saugus, then a part of Lynn, which latter at this time included the present Lynn, Lynnfield, Nahant, Reading, Saugus, South Reading and Swampscott. Known from 1629 to 1637 by its Indian name "Saugus," usually spelled "Saugust" at this time, at the latter date its name was changed to Lynn —"Lin" of the old records — the present communities once a part of it having been set off from time to time. The present Saugus, the site of the iron works, was not incorporated until 1815.

Largely through the assistance of John Winthrop, Jr., who was in England at the time, and who became greatly interested in the project — so much so that it was repeatedly referred to as "his" iron works — eleven wealthy Englishmen were persuaded to form "The Company of Undertakers for the Iron Works," for the starting of which they subscribed one thousand pounds. Winthrop, as he later set out in a petition to Parliament for one thousand pounds damages:

> "did with costs and charges embark himself with many workmen, servants and material for the said setting up of the iron works in the said place,"

but difficulties with English port authorities so delayed the sailing of his vessel, the "An Cleve," that work on the plant could not be begun until the spring of 1644, whence the petition for damages.

In the fall of 1644 the Massachusetts General

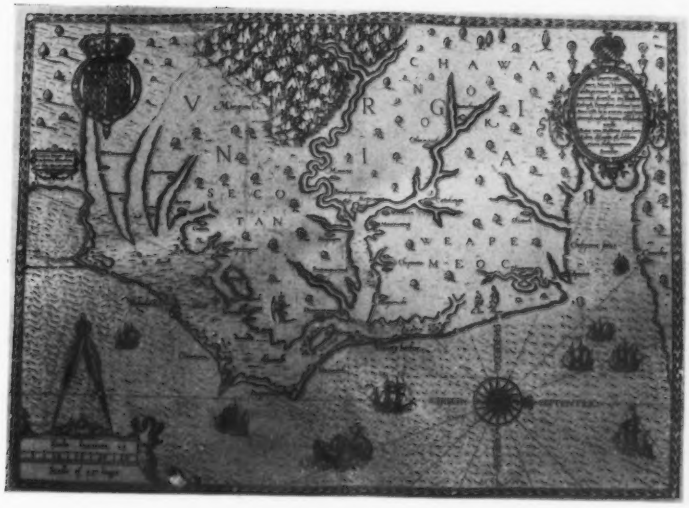
A briefe and true report of the new found land of Virginia: of the commodities there found and to be raysed, as well marchantable, as others for victuall, building and other necessarie vses for those that are and shalbe the planters there, and of the nature and manners of the naturall inhabitants: Discouered by the English Colony there seated by Sir Richard Greinuile Knight on the yeere 1585. which remained vnder the gouernment of Ralfe Lane Esquier, one of her Maiesties Equiers, during the space of twelue monthes: at the speciall charge and direction of the Honourable S[IR] WALTER RALEIGH Knight, Lord Warden of the Stannaries, who therein hath beene fauoured and authorized by her Maiestie and her letters patents.

Directed to the Aduenturers, Fauourers, and Welwillers of the action, for the inhabiting and planting there:

By Thomas Hariot, seruant to the abouenamed Sir Walter, a member of the Colony, and there employed on discouerie.

Imprinted at London 1588.

Thomas Hariot's account of Virginia in 1588



Hariot's map of Roanoke Island, where iron ore was first found in early America

Tombstone at Knight's Corner Burying Ground
Pelham, Massachusetts

Iron Industry

Court granted the undertakers a twenty-one year monopoly, with the privilege of establishing iron works — which, however, must include forges as well as smelters — at six different localities, at each of which they were to receive three square miles of land from the unappropriated lands of the Colony, provided the works were established within three years. Also:

> "The undertakers and adventurers, together with their agents, servants and assigns, shall be and are hereby free from all taxes, assessments, contributions and other public charges whatsoever, for so much of their stock or goods as shall be employed in and about the said iron works for and during the term of years"

and it was further granted and ordered that:

> "all such clerks and workmen as miners, founders, finers, hammer-men and colliers, necessarily employed or to be employed in and about the said works, built or to be built for any of the services thereof shall from time to time during the term of years be and hereby are absolutely freed and discharged from all ordinary trainings, watchings, etc., but that every person at all times be furnished with arms, powder, shot, etc., according to order of Court."

The first of the six works the Undertakers were authorized to build — but one other, that at Braintree, was later constructed — was at the then head of navigation of the Saugus River, in the present Saugus, and to it fell the honor of producing the first iron casting made in America.

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Documentary Notes — Continued

XXI

For a Leather Fire Hose

Observing in your paper of yesterday, a piece from the Weekly Magazine, signed R. P. on an improvement in fire-buckets, the writer of which very justly observes the difficulty of handling water from the pump to the engine, and when the bucket arrives at the engine it is not more than half full.

The description of the bucket and all the appendages are, in my opinion, a mere temporary makeshift. Suppose we do as all the European nations and some of our sister states — let us have no buckets of any description; but in place of which every engine ought to have at least eighty feet of leather hose, that is to say, two forty feet lengths. If a fire took place within eighty feet of the pump, the engine would be made to act without a bucket; if it was farther from the pump, let an engine be filled and discharge her waters into another engine; then there would be 160 feet distance, and if that did not reach add a third, and so on to a considerable length. In my opinion, all the screws belonging to engines ought to be made to one size and thread, so borrowing from one engine to supply the deficiency of another. It is said that leather hose do not answer this climate; they may as well say, a leather pair of bellows is as deficient. The leather hose answers in New York, I am certain — and why not here?

Is it not a dangerous situation to stand on the top of an engine? Has it not proved fatal to several? Or can water be discharged at so many different angles from the top of an engine, as from a leather hose? I say no, and I can prove it cannot. It would be much better to exercise ourselves in the system of extinguishing fires, than war; we are attacked by the enemy oftener than by any other. This is not my invention, it is done almost everywhere except here. The leather buckets, in my opinion, would be better applied to soaling.

Hydraulicus.

N. B. By the above method, you have no occasion to knock up your neighbors, to get their buckets; all that is wanting is men to work the pumps and engines. There is likewise no time lost in forming what are called lanes.

(The Weekly Magazine, Phila., Feb. 10, 1798, p. 60)

The Chronicle

issued occasionally for members of
EARLY AMERICAN INDUSTRIES ASS'N

The purpose of the association is to encourage the study and better understanding of early American industry, in the home, in the shop, on the farm, and on the sea, and especially to discover, identify, classify, preserve and exhibit obsolete tools, implements, utensils, instruments, vehicles, appliances and mechanical devices used by American craftsmen, farmers, housewives, mariners, professional men and other workers.

EDWARD DURELL, *President*,
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MRS. FRANK D. PIERCE, *Secretary and Treasurer*,
Leicester, Mass.

JOHN DAVIS HATCH, JR., *Editor*
Lenox, Massachusetts

Communications regarding the contents of The Chronicle should be addressed to the Editor; Suggestions for members and other matters either to the President or the Secretary-Treasurer.

MEMBERSHIP: Regular members contribute $2.00 annually.
Supporting Members contribute $5.00 or more a year.

BACK NUMBERS of The Chronicle are available in some instances for fifty cents or one dollar, depending on rarity. Index to Volume I and II is available for one dollar each.

Editor's Note

Charles Rufus Harte, whose excellent introduction to the Early American Iron Industry appears in this issue writes that his early idea was to cover the history of an industry in one section, but the project grew with the realization that the importance of the iron industry called for more detail. Now he thinks, the membership will be glad to learn, there will be two more sections on the development. For later articles we are also assured all the cuts needed.

When pressed for illustrations for the present article, Mr. Harte sent, as a Christmas Greeting to the Editor, a photograph of the tomb stone of Warren Gibbs, which we reproduce with this issue. Mary Felton's activity could be considered an Early American Industry, though possibly rarely practiced. The Editor hopes it's one now forgotten.

In Memorium

The Membership will be particularly sorry to see the number who have deceased since the last issue was published.

At the fall meeting of the Board of Directors a resolution on the death of our vice-president, Wallace K. Brown, was passed with Charles Messer Stow asked to prepare a suitable memorial to be sent to Mrs. Brown as an expression of regret by our organization.

Though not active in official capacity with this organization, Industries has also lost a staunch friend and worker in the passing of William Sumner Appleton, founder, and executive Director of The Society for the Preservation of New England Antiquities. To the promotion and development of this organization, Mr. Appleton had devoted his entire life.

Membership

Membership lists should be amended as follows: (N) indicates new member; (D) indicates decease; (Ch) change of address.

DISTRICT OF COLUMBIA

Washington, D. C.: Wilkins, John H. (1305) (D)

MASSACHUSETTS

Boston: Appleton, William Sumner, (1330) (D)
Brookline: Kent, Ira Rich (148) (D)
Lenox: Hatch, John Davis Jr. (637) (Ch)
Northampton: Atwater, Lawrence W. (1455) Wiggins Country Store, Inc. (Ch)
Holmes, Mrs. Birther H. (1462) Wiggins Country Store, Inc. (Ch)

NEW JERSEY

Camden: Lippincott, Mrs. M. L. E. (D)
East Orange: Britton, William R. (843) (D)
Maplewood: Robertson, James A. (1130) (D)
Montclair: Brown, Wallace K. (340) (D)

NEW YORK

Cooperstown: Crooks, Robert W. (1477) (N)
Farmingdale: Simmons, George M. (1298) N. Y. State Institute of Agriculture (Ch)
Hempstead: Kilmer, Mrs. T. W. (970) (D)
Schenectady: Trenchard, Mrs. H. S. (1104) (D)

PENNSYLVANIA

Bloomsburg: Russell, Dr. J. Almus (1403) 173 E. 11th Street (Ch)
Gettysburg: Cooley, Miss Sara (1150) (D)

VERMONT

Calais: Stowell, Robert (1480) (N)

Staten Island Meeting

No record has been made in *The Chronicle* of the meeting held last fall of Early American Industries Association at the Staten Island Historical Society in Richmond. It was an informal meeting and one of the most pleasant the Association has had. Registration took place in the Library of the Museum in the latter part of the morning of Friday, October 17th. While the Directors of the Association held their Annual Meeting, members visited the collections of the Association. A regular meeting of the Association was called together at 2:30 with the introduction of the new president, Mr. Edward Durell, by the retiring president, John Davis Hatch, Jr. Members were also welcomed by Mr. Raymond M. Safford, President and Chairman of the Historical Society.

Talks followed on "Gage's Sandpaper Factory, Tottenville, Staten Island" by Charles C. Stoddard, on "Material Found in Excavating Revolutionary Fort Sites on Staten Island," by Raymond C. Fingado, and on "Old Building Construction Methods," by Loring McMillen. Members were given an informal reception and refreshments as guests of the Society immediately after. That evening at an informal dinner of the Association held at the Richmond County Country Club, Miss Alice Winchester, Editor of *Antiques*, gave a charming and stimulating talk.

The following morning members met again at the Historical Association for an informal exchange of information and questions and identification of Whatsits which members had brought. At the formal meeting concluding the morning, an offer of Cooperstown, New York, as the place of the next meeting was brought forward; a discussion of the number of meetings the Association should hold a year was held, and the matter was referred to the President to poll the Board of Directors on the number of meetings, possible locations and subjects to be covered. Members were the guests of the Society at an informal buffet lunch following the meeting. All were agreed that the work the Staten Island Historical Society has done is excellent, and a model for small regional museums everywhere — a remarkable demonstration of what can be done with limited means by a well organized, hard working volunteer staff.

At the request of the Editor of *The Chronicle* the volunteer Director of the collection, Loring McMillen has written an account of the Society so members of the Association who were unable to attend the meeting or visit the Society would gain an idea of what the volunteer staff had done, and hopes to do. The account follows. Readers of *The Chronicle* are also referred to pictures of the Society which appeared in Vol. III, Number 13.

The Staten Island Historical Society

by Loring McMillen

The Staten Island Historical Society was organized and incorporated in 1856 with the unusually enlightened purpose of collecting and preserving "whatever relates to the History of Staten Island." It wasn't until many years later — 1922 — that this purpose began to bear fruit, for in that year, the Society absorbed the Staten Island Antiquarian Society and by this act gained possession of the Stillwell-Perine House, 1476 Richmond Road, Dongan Hills, Staten Island, as its headquarters. This rambling old stone house was built in part in 1679 and is a splendid example of a simple colonial dwelling.

Little in the way of collections were made until, in 1934 the Society obtained permission to use the abandoned County Clerk's and Surrogate's Offices in the Village of Richmond, Staten Island, for a Museum. The oldest part of this building was built in 1848 and with additions housed these offices of the County of Richmond until 1920 when they were moved to St. George. After its acquisition as a Museum the Society was at last in a position to carry out the purposes for which it was organized.

Under the able leadership of the late William T. Davis, President of the Society, local historian, and a famous naturalist, the work of building the Museum collections was entrusted entirely to a group of volunteers — members of the Society. No funds were available either for the purchase of material or for salaries for a staff, and the group was entirely without experience in Museum practices or administration as well as without knowledge of collectible material. Besides, work had to be accomplished during spare time, as the workers were gainfully employed elsewhere.

These limitations, with the exception of available time, possibly proved to be beneficial rather than harmful, for the Volunteer Staff, as the group of workers came to be called, were able to approach their problems unhampered by set ideas and prejudices.

The results have been interesting and novel and have served as a model for similar work elsewhere. No attempt is made to build up selective or monumental collections of any one period or type of material, but rather to achieve (through representative examples) a record of the past from the earliest beginnings to the present time. Such ephemeral values as age, rarity, monetary value or beauty, in themselves, are secondary to the historic value of the object. Does the object by itself, or with related material, tell a story, and what part did it play in the life of the community?

The collections are from Staten Island only, or of material identical to that which was used on Staten Island. In this way the Society records those local characteristics which are peculiar to any one community. Staten Island, first settled in 1639, is an island of 58 square miles and approximately 183,000 population. As part of the great City of New York, it is rapidly losing what individuality it once possessed. The staff believes it is a prime purpose of a local historical society to save through its collections and activities this individuality.

When in 1934 the Society first planned an Historical Museum at Richmond, there was no adequate material owned by the Society with which to arrange exhibits. The first problem therefore was where and how to obtain this material. A large two storied, eight room building, with 10,000 feet of floor space would be available after repairs and improvements by the Works Progress Administration were completed. The Volunteer Staff solved this problem in an unusual and typical way. Visits were made wherever a likely prospect was presented, such as an old house or farm, or ancient building. A knock at the door, a statement as to the purpose of the visit, led to more friendly conversation and eventually to a visit to garret, cellar, or outbuilding, where some relic was uncovered. Some visits resulted in only one or two items, but many resulted in the emptying of attics or barns of relics of all descriptions. Many old families eagerly welcomed the opportunity to place their material in a "Family Museum."

When opened in 1935, and to this day, there has never been a lack of material, and while the Museum serves a rapidly changing community with the resultant loss of the old homes and even families, a representative collection of approximately 30,000 items has been gathered in a space of thirteen years.

And for thirteen years a Volunteer Staff has faithfully cared for this collection, adding to it, exhibiting, cataloging, indexing, renewing and changing, loaning material to schools and libraries, holding meetings, and publishing a quarterly magazine. The Museum is opened Sundays only, 2 to 6 P. M., by the same volunteers, who explain the material to those interested.

In 1939 there was presented to the Society by one of its active members the old Voorlezer's House, a two story frame dwelling erected about 1696 by the Reformed Dutch Church on Staten Island, as a school, church, and dwelling for the Voorlezer, the person employed by them to teach school and in the absence of the minister to conduct services. The building, in the absence of contrary data, is thought to be the oldest existing building in the country erected for elementary school purposes. Exhaustive restoration work was carried out on this building and while it still awaits minor additions, is open to the public.

The Stillwell-Perine House former headquarters is at this time undergoing a searching study which it is expected will lead to its restoration. Many changes have taken place over the years and to determine these in their chronological order is necessary for a proper restoration.

The Society is also planning to build a "Barn Museum" near the Voorlezer's House to exhibit larger material than that contained in the Museum, such as vehicles, farm machinery and old building material. No similar collection is available to the millions of people living within the metropolitan area of New York and the educational value is further enhanced by rural surroundings not found elsewhere in the City.

The Society also plans to acquire for its expanding collections, the Old County Court House, built in 1837, and located directly opposite the Museum. This building, together with the present Museum, the Voorlezer's House, an old residence of 1700 standing near by and to be acquired, make a unique group which, together with the comprehensive Museum collections amply fulfill the purpose of the Society "to collect and preserve whatever may relate to the History of Staten Island." In a small way, if funds are available, the Society also envisions a partial restoration of the historic village of Richmond with many of the old industries or activities such as Blacksmith Shop, the Gristmill and Country Store shown in their proper settings.